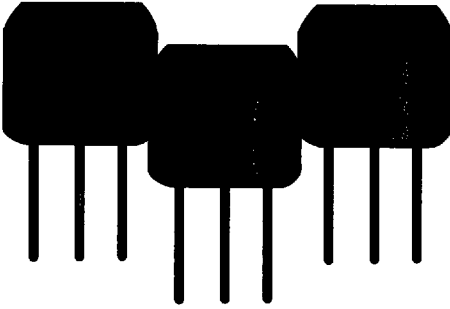


CR100 & 105 Series

1.0 AMP SILICON CONTROLLED PLASTIC RECTIFIERS

Description

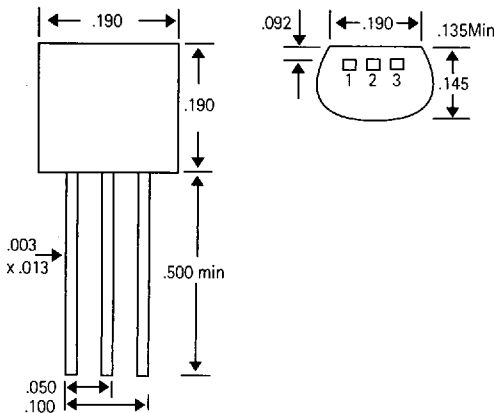


Features:

- IC Compatible (TTL & MOS)
- Non-Sensitive gate trigger
- Voltage Ratings from 100V to 600V
- Void Free Glass Passivated Chips
- Replaces .8 AMP Industry standard with no cost adder

Mechanical Details

all dimensions in inches



CR100 & 105 Series

Maximum Ratings

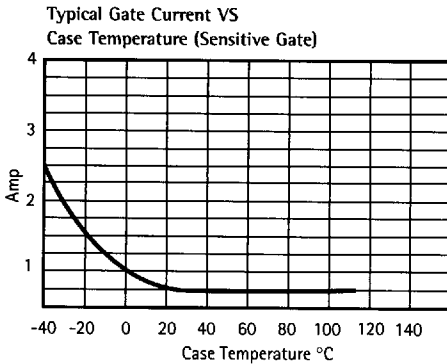
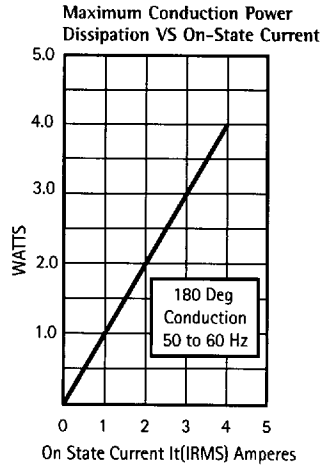
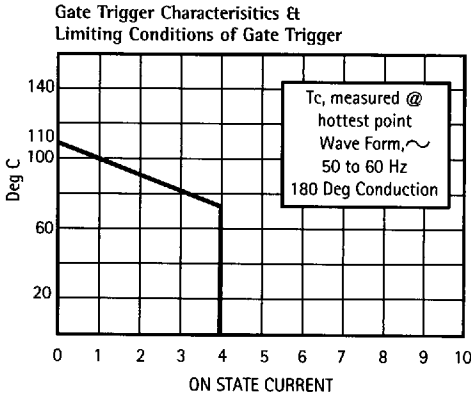
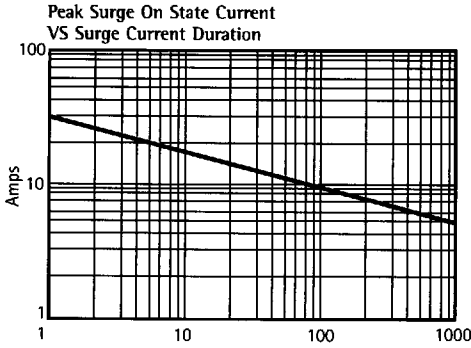
Electrical Characteristics @ 25°C

		Voltage TR410 Et 425 Series			
		100	CR100-3	CR105-3	Volts
		200	CR100-4	CR105-4	Volts
		300	CR100-5	CR105-5	Volts
		400	CR100-6	CR105-6	Volts
		500	CR100-7	CR105-7	Volts
		600	CR100-8	CR105-8	Volts
V_{DRM}	Repetitive Peak Off-state Voltage				Volts
V_{RRM}	Maximum Repetitive Peak Reverse Voltage				Volts
	$T_c = 125\text{ C}$				
$I_{T(RMS)}$	RMS On State Current	1.0		1.0	Amp
	$T_c = 50\text{ C}$, Conduction Angle 180 Deg.				
I_{TSM}	Peak Surge Non-Repetitive On State Current	10		10	Amp
	One cycle at 50 or 60Hz				
I_{GTM}	Peak Gate Trigger Current / 3 uS Max	1.0		1.0	Amp
P_{GM}	Peak Gate Power Dissipation / 1gt \neq 1gtm	5.0		5.0	Watt
$P_{G(AV)}$	Average Gate Power Dissipation	0.2		0.2	Watt
I_{DRM}	Peak Off-State Current, $T_C = 25^\circ\text{C}$	10		10	uAmp
I_{RRM}	$T_C = 125^\circ\text{C}$ (RG-K=1K ohms, V_{drm} Et $V_{rrm} = \text{Max}$)	100		100	uAmp
V_{TM}	Maximum On-State Voltage (Peak)	1.7		1.7	V Max
	$I_t = \text{Rated Amps}$, $T_C = 25\text{ C}$				
I_{HO}	DC Holding Current	5.0		5.0	mA Max
	Gate Open Et $T_C = 25\text{ C}$				
Dv/Dt	Critical Rate of Rise of OFF State Voltage	5.0		5.0	V/uS
	Gate Open Et $T_C = 110\text{ C}$				
I_{GT}	DC Gate Trigger Current for Anode	200		500	mA Max
	$V_D = 7\text{ VDC}$, $R_I = 100\text{ ohms}$, $T_C = 25\text{ C}$				
V_{GT}	DC Gate Trigger Voltage	0.8		0.8	V Max
	$V_D = 7\text{ VDC}$, $R_I = 100\text{ Ohms}$, $T_C = 25\text{ C}$				
T_{GT}	Gate Controlled Turn On Time ($T_d + T_r$) Tgt	2.2		2.2	uSec
	$I_{ct} = 10\text{ mA}$, $T_C = 25\text{C}$				
	Thermal Resistance, Junction to case	75		75	$^\circ\text{C/W}$

CR100 & 105 Series

CR100 & 105 Series

CR100 & 105 Series



Gate control may be lost during and after surge. Gate control will be regained after Tj returns to steady state value.

Surge current duration, full cycle @ 60Hz.
Current wave form 60Hz, Sinesoidal.
Resistive load, It(rms) = Amps 2 50°C.